

CREEL CENSUS
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Creel census is a fisheries sampling device used to gather information on fishing pressure, number and kind of fish caught, and other specific information which is desired for the management of a fishery on a lake or stream.

In recent years, members of all divisions of the Department have co-operated in operating check stations and in taking census during the various fishing seasons.

This class is given to review the various types of creel censuses, to list what information may be wanted from a census, and to explain how the information is of value.

I. Department personnel conduct three types of creel censuses:

- A. Formal: Used to determine the total season's catch, fishing pressure, and species composition of the catch.
 - 1. The season is stratified into time period (two weeks or month usually).
 - 2. The days are selected at random and the schedule must be followed, rain or shine.
 - 3. As many angles as possible are contacted and the observed but not contacted anglers are listed.
- B. Trend: Used to given long-term trends over a period of several years.
 - 1. Selected days such as opening day, Fourth of July, and Labor Day are checked or several week ends and holidays are checked each month.
 - 2. Check stations are set up to collect completed results from many anglers.
- C. Spot Checks: Used to gather limited trend data during the course of regular duties.
 - 1. These are the unscheduled checks made during a patrol or at road blocks.
 - 2. The information gathered is made available to the Area Biologist who analyzes it and tabulates the results.

- II. Basic information which is compiled from raw creek census data:
- A. Fishing pressure: recorded as man-hours or man-days fished per acre or mile of stream.
 - B. Fishing success: recorded as the number of fish caught per hour or day or trip.
 - C. Species composition: recorded by number or per cent of each species caught.
 - D. Life history data: records of length, weights, sex and maturity, and scale samples are taken if needed for a specific purpose.
- III. Correct census procedures result in comparable data:
- A. Check stations are better than streamside checks as most of the anglers are done fishing for the day. Check stations are not always practical along highways or where there is more than one access road.
 - B. Data to be recorded are determined by the type of census, the time available and the need for specific information. Confer with Biologies before the census.
 - 1. List complete identification of water, date, and your name.
 - 2. Use one line of census form for each individual or party, record total fish by species, and hours fished for party. Do not record averages for party.
 - 3. There should be a column to indicate if the party is through fishing for the day.
 - 4. If life history data are gathered, the form should include special columns.
 - 5. Space should be provided to record the weather and water conditions.
- IV. How can the census data be used?
- A. The season's total catch, fishing pressure, and fishing success can only be determined by a formal census.
 - B. Trend census data are subject to variations caused by variable water and weather conditions on the relatively few days that are checked; however, over a period of years, extreme changes in fishing pressure and catch can be noted.
 - C. Spot checks provide a written record of what you have observed and trends may be noted that indicate the need for more elaborate census techniques. Because of the limited nature of spot checks, extreme caution must be used in analyzing the data.
 - D. Trend and spot check censuses can be made more representative of the true season's catch picture by attempting to check your heavily fished streams several days each month. Because of other duties, you might want to do this only on a few streams or lakes.

Because of the large size of the fisheries management areas, the co-operation of Department personnel in taking creel census is valued as it gives the Area Biologist an over-all picture of the fishing pressure and catch. Even limited data are valuable. An example of this is the census data from anglers fishing mountain lakes.

The summary of each area's creel census data, which is compiled and sent back to the Officers, is of value to them as it provides a permanent memory aid which can be referred to in the future. The human memory is a wonderful thing but it has its limits. We are inclined to remember the good fishing days and not the bad ones.

Since we have many types of fisheries census, procedures will vary slightly. The Biologist and the Officers should get together before the season and decide where they want to get the most data, what kinds of data to collect, and to review how the data should be collected.